WE CLAIM:

1. A pharmaceutical composition comprising two or more antisense oligonucleotides complementary to a thymidylate synthase mRNA or analogues of said oligonucleotides and a pharmaceutically acceptable carrier.

2. The pharmaceutical composition according to claim 1, wherein at least one of said antisense oligonucleotides or analogues thereof comprises at least 5 consecutive nucleotides from the nucleic acid sequences as set in forth in any one of SEQ ID NOs: 1, 2, 3, 5, 6, or 11.

3. The pharmaceutical composition according to claim 1, wherein said antisense oligonucleotides or analogues thereof comprise at least 5 consecutive nucleotides from the nucleic acid sequences as set in forth in any one of SEQ ID NOs: 1, 2, 3, 5, 6, or 11.

4. The pharmaceutical composition according to any one of claims 1, 2 or 3, wherein said analogues comprise one or more phosphorothioate linkages.

5. The pharmaceutical composition according to any one of claims 1-4, wherein said analogues comprise one or more 2'-methoxy-ethoxy substituted nucleotide.

6. The pharmaceutical composition according to any one of claims 1-5, further comprising one or more chemotherapeutic agent.

7. Use of a composition comprising two or more antisense oligonucleotides complementary to a thymidylate synthase mRNA or analogues of said oligonucleotides in the treatment of cancer.

8. Use of a composition comprising two or more antisense oligonucleotides complementary to a thymidylate synthase mRNA or analogues of said oligonucleotides in conjunction with one or more chemotherapeutic agent in the treatment of cancer.

9. Use of a composition comprising two or more antisense oligonucleotides complementary to a thymidylate synthase mRNA or analogues of said oligonucleotides to sensitize neoplastic cells to a chemotherapeutic agent.

10. The use according to any one of claims 7, 8 or 9, wherein at least one of said antisense oligonucleotides or analogues thereof comprises at least 5 consecutive nucleotides from the nucleic acid sequences as set in forth in any one of SEQ ID NOs: 1, 2, 3, 5, 6, or 11.

11. The use according to any one of claims 7, 8 or 9, wherein said antisense oligonucleotides or analogues thereof comprise at least 5 consecutive nucleotides from the nucleic acid sequences as set in forth in any one of SEQ ID NOs: 1, 2, 3, 5, 6, or 11.

12. A combination of two or more antisense oligonucleotides complementary to a thymidylate synthase mRNA or analogues of said oligonucleotides for use in the treatment of cancer together with one or more chemotherapeutic agents, wherein the use of the combination enhances the anti-tumour effect of standard doses of the one or more chemotherapeutic agents.

13. A combination of two or more antisense oligonucleotides complementary to different regions of a thymidylate synthase mRNA or analogues of said oligonucleotides for use in the treatment of cancer together with a chemotherapeutic agent, wherein the use of the combination reduces the amount of chemotherapeutic required to effectively treat a mammal with cancer.

14. A combination of two or more antisense oligonucleotides complementary to different regions of a thymidylate synthase mRNA or analogues of said oligonucleotides for use together with a chemotherapeutic agent to treat a mammal, wherein the combination and chemotherapeutic agent reduce the number of neoplastic cells in said mammal.

15. A combination of two or more antisense oligonucleotides or analogues of said oligonucleotides for use in the treatment of cancer together with one or more chemotherapeutic agents, wherein the sequences of two oligonucleotides of the combination are selected from the group of SEQ ID NO: 1 and 2, or SEQ ID NO: 1 and 3.